REMARKS

The Examiner rejected Claims 1 to 9, 47 to 55 and 72 under U.S.C.103(a) as being obvious over Epard (US5,241,625A) in view of Yang (US20020035596A1). The Examiner rejected Claims 10 and 56 under 35 U.S.C.103(a) as obvious over Epard (US5,241,625A) in view of Yang (US20020035596A1) and further in view of Caulk (US0005392391A). The Examiner rejected Claims 11, 12, 57 and 58 under 35 U.S.C.103(a) as obvious over Epard (US5,241,625A), in view of Yang (US20020035596A1), in view of Redford (US6,049,330A). The Examiner rejected Claims 13 and 59 under 35 U.S.C.103(a) as obvious over Epard (US5,241,625A) in view of Yang (US20020035596A1) and further in view of Larson (US6,031,550A).

Claims 1 to 13, 47 to 59 and 72 remain in the Application.

REJECTION OF CLAIMS 1 TO 9, 47 TO 55 AND 72 UNDER U.S.C.103(a)

The Examiner rejected Claims 1 to 9, 47 to 55 and 72 under U.S.C.103(a) as being obvious over Epard (US5,241,625A) in view of Yang (US20020035596A1).

Applicants' independent Claim 1 reads as follows, with emphasis added:

> A method for sending a composite image from a host computer to a display computer, **the display computer having an off-screen memory with available memory**, the method comprising:
> breaking said composite image into one or more sub-images, **wherein each of said sub-images can fit into the available memory of the off-screen memory;** and
> transmitting each of said sub-images to said display computer for storage in the off-screen memory.

Applicants' independent Claim 47 reads as follows, with emphasis added:

> An apparatus for sending a composite image from a host computer to a display computer, **the display computer having an off-screen memory with available memory**, the apparatus comprising:
> means for breaking said composite image into one or more sub-images, **wherein each of said sub-images can fit into the available memory of the off-screen memory**; and
> means for transmitting each of said sub-images to said display computer for storage in the off-screen memory.

Applicants' independent Claim 72 reads as follows, with emphasis added:

> A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for sending a composite image from a host computer to a display computer, **the display computer having an off-screen memory with available memory**, the method comprising:
> breaking said composite image into one or more sub-images, **wherein each of said sub-images can fit into the available memory of the off-screen memory**; and
> transmitting each of said sub-images to said display computer for storage in the off-screen memory.

As shown above, each of Applicants' independent Claims 1, 47 and 72 specifically recite a display computer with off-

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screen memory with available memory and wherein each of said sub-images can fit into the available memory of the off-screen memory.

As the Examiner has noted in the present official action, the Examiner's previous statement that "A bitmap is the same as a frame buffer or memory" and therefore QuickDraw's use of the bitmap is the same as Applicants' use off-screen memory is not only contradicted in Applicants' explanation of the problem in Applicants' background section (Page 5, paragraph 0008, shown below) but also in the text of the Epard reference itself. For instance, Epard column 4 line 65 to column 5, line 21, reads as follows, with emphasis added:

> Referring now to FIG. 3A, QuickDraw 21 converts graphics commands from higher-level application program 23 for presentation on video screen 25. **QuickDraw 21 is the graphics library which is built into every Macintosh personal computer**, and is described more fully in "Inside Macintosh, Vol. 1, by Apple Computers Inc., 1985 which is incorporated by reference as if fully set forth herein. Macintosh computers include a high resolution, memory mapped, raster graphics display screen 25 upon which text and graphics appear. Everything on the screen 25 is usually drawn with the QuickDraw 21 routines supplied in the Macintosh's ROM (not shown). It should be noted that not everything which can appear on the screen is drawn with QuickDraw 21 routines.
>
> **QuickDraw 21 works by manipulating the bits in a special area of memory called the frame buffer (not shown). The bits in the frame buffer memory represent the pixels on the display screen. The Macintosh hardware constantly keeps the frame buffer image updated on the display.**
>
> **Occasionally, some Macintosh application 23 programs display images on the screen 25 by directly manipulating bits in the frame buffer.** Usually, however, everything on the screen is drawn by QuickDraw 21.

The type of operation disclosed in Epard is specifically addressed, and its weaknesses discussed in Applicants' background section at page 5, paragraph 0008, which reads as follows, with emphasis added:

> [0001] To achieve the appearance of an instantaneous update, graphic application programs frequently construct a composite image off-screen and then blit the composite image onto the screen. For example, in X Windows, an X client application **may build the composite image in an off-screen pixmap and then copy it to a realized window using XCopyArea.** In many thin client architectures, **a large composite image will require more than one protocol command to send. At low bandwidth, the composite image will appear gradually instead of instantaneously** - defeating the intention of the application programs and degrading the user experience.

In the present action, the Examiner is proposing to combine the Yang reference (US20020035596A1) with Epard (US5,241,625A) to, according to the Examiner, yield a resulting structure including a display computer with off-screen memory with available memory and wherein each of said sub-images can fit into the available memory of the off-screen memory. However, this proposed combination still fails to address the fact that Epard (US5,241,625A) discloses, teaches and suggests the use of QuickDraw 21 and bitmaps and therefore not only fails to disclose the requisite motivation to combine with the Yang reference, but actually teaches away from such a combination. In short, Applicants respectfully submit that the proposed combination of Epard and Yang is improper for the same reason that it was improper to assert that "A bitmap is the same as a frame buffer or memory" – Epard simply does not disclose, teach or suggest this feature because Epard uses

completely different means in a completely different environment.

Applicants respectfully traverse the obviousness rejection of Claims 1, 47 and 72. To make a prima facie obviousness rejection, the MPEP directs, with emphasis added:

> **BASIC CONSIDERATIONS WHICH APPLY TO OBVIOUSNESS REJECTIONS**
> When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to:
> (A) The claimed invention must be considered as a whole;
> (B) **The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination;**
> (C) **The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention;** and
> (D) **Reasonable expectation of success is the standard with which obviousness is determined.**

MPEP § 2141, 8th Ed., Rev. 2, p. 2100-120 (May 2004). It is noted that this directive stated "the following tenets . . . **must be adhered to**." Accordingly, failure to adhere to any one of these tenets means that a prima facie obviousness rejection has not been made.

The rejection failed to adhere to multiple of these tenets. In particular, Applicants respectfully submit that the Examiner is failing to consider the cited references as a whole, including the recited limitations and working environments and tools used with the references such as the use of QuickDraw 21 and bitmaps.

In addition, Applicants respectfully submit that the Examiner has failed to show a suggestion or desirability, and thus the obviousness, of making the proposed combination in either reference.

In addition, Applicants respectfully submit that the Examiner has failed to reasonable expectation of success.

In addition, Applicants respectfully submit that the Examiner is using impermissible hindsight vision afforded by the claimed invention to propose an improper combination.

In light of the discussion above, Applicants respectfully submit that the proposed combination of the Epard reference (US5,241,625A) with the Yang reference (US20020035596A1) is improper. Therefore, Applicants respectfully request the Examiner withdraw the rejection of Claims 1, 47 and 72 and allow Claims 1, 47 and 72 to issue.

Claims 2 to 9 depend, directly or indirectly on Claim 1. Claims 48 to 55 depend, directly or indirectly on Claim 47. Consequently Claims 2 to 9 and 48 to 55 include all of the features and limitation of parent Claims 1 and 47, respectively. Therefore Applicants respectfully submit that Claims 2 to 9 and 48 to 55 are also patentable over the Epard reference and the Yang reference for at least the reasons discussed above and Applicants further request the Examiner withdraw the rejection of Claims 2 to 9 and 48 to 55 and allow Claims 2 to 9 and 48 to 55 to issue as well.

REJECTION OF CLAIMS 10 AND 56 UNDER 35 U.S.C. 103(a)

The Examiner rejected Claims 10 and 56 under 35 U.S.C.103(a) as obvious over Epard (US5,241,625A) in view of Yang (US20020035596A1) and further in view of Caulk (US0005392391A).

Applicants respectfully submit that the addition of the Caulk reference does nothing to cure the deficiencies of the Epard reference and Yang reference discussed above. Consequently, Applicants respectfully submit that the Examiner has failed to show where in the Epard reference, the Yang reference, the Caulk reference, or in any **proper** combination of the Epard, Yang and Caulk references, it is disclosed, taught

or suggested a display computer with off-screen memory with available memory and wherein each of said sub-images can fit into the available memory of the off-screen memory as recited in Applicants' independent Claims 1, 47 and 72. Therefore, Applicants respectfully submit that Claims 1, 47 and 72 are patentable over the Epard reference, the Yang reference, the Caulk reference, or in any **proper** combination of the Epard, Yang and Caulk references.

Claim 10 depends, directly or indirectly on Claim 1. Claim 56 depends, directly or indirectly on Claim 47. Consequently Claims 10 and 56 include all of the features and limitations of parent Claims 1 and 47, respectively. Therefore, Applicants respectfully submit that Claims 10 and 56 are also patentable over the Epard reference, the Yang reference, the Caulk reference, or in any **proper** combination of the Epard, Yang and Caulk references, for at least the reasons discussed above and Applicants further request the Examiner withdraw the rejection of Claims 10 and 56 and allow Claims 10 and 56 to issue.

REJECTION OF CLAIMS 11, 12, 57 AND 58 UNDER 35 U.S.C. 103(a)

The Examiner rejected Claims 11, 12, 57 and 58 under 35 U.S.C.103 (a) as obvious over Epard (US5, 241,625A), in view of Yang (US20020035596A1), in view of Redford (US6, 049,330A).

Applicants respectfully submit that the addition of the Redford reference does nothing to cure the deficiencies of the Epard reference and Yang reference discussed above. Consequently, Applicants respectfully submit that the Examiner has failed to show where in the Epard reference, the Yang reference, the Redford reference, or in any **proper** combination of the Epard, Yang and Redford references, it is disclosed, taught or suggested a display computer with off-screen memory

with available memory and wherein each of said sub-images can fit into the available memory of the off-screen memory as recited in Applicants' independent Claims 1, 47 and 72. Therefore, Applicants respectfully submit that Claims 1, 47 and 72 are patentable over the Epard reference, the Yang reference, the Redford reference, or in any **proper** combination of the Epard and Redford references.

Claims 11 and 12 depend, directly or indirectly on Claim 1. Claims 57 and 58 depend, directly or indirectly on Claim 47. Consequently Claims 11, 12, 57 and 58 include all of the features and limitations of parent Claims 1 and 47, respectively. Therefore, Applicants respectfully submit that Claims 11, 12, 57 and 58 are also patentable over the Epard reference, the Yang reference, the Redford reference, or in any **proper** combination of the Epard, Yang, and Redford references, for at least the reasons discussed above and Applicants further request the Examiner withdraw the rejection of Claims 11, 12, 57 and 58 and allow Claims 11, 12, 57 and 58 to issue.

REJECTION OF CLAIMS 13 AND 59 UNDER 35 U.S.C. 103(a)

The Examiner rejected Claims 13 and 59 under 35 U.S.C.103 (a) as obvious over Epard (US5, 241,625A) in view of Yang (US20020035596A1) and further in view of Larson (US6, 031,550A).

Applicants respectfully submit that the addition of the Larson reference does nothing to cure the deficiencies of the Epard reference and Yang reference discussed above. Consequently, Applicants respectfully submit that the Examiner has failed to show where in the Epard reference, the Yang reference, the Larson reference, or in any **proper** combination of the Epard, Yang, and Larson references, it is disclosed, taught or suggested a display computer with off-screen memory

with available memory and wherein each of said sub-images can fit into the available memory of the off-screen memory as recited in Applicants' independent Claims 1, 47 and 72. Therefore, Applicants respectfully submit that Claims 1, 47 and 72 are patentable over the Epard reference, the Yang reference, the Larson reference, or in any **proper** combination of the Epard, Yang, and Larson references.
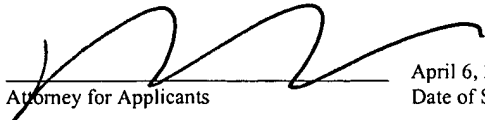
Claim 13 depends, directly or indirectly on Claim 1. Claim 59 depends, directly or indirectly on Claim 47. Consequently Claims 13 and 59 include all of the features and limitations of parent Claims 1 and 47, respectively. Therefore, Applicants respectfully submit that Claims 13 and 59 are also patentable over the Epard reference, the Yang reference, the Larson reference, or in any **proper** combination of the Epard and Larson references, for at least the reasons discussed above and Applicants further request the Examiner withdraw the rejection of Claims 13 and 59 and allow Claims 13 and 59 to issue.

CONCLUSION

For the foregoing reasons Applicants respectfully request allowance of all pending claims. If the Examiner has any questions relating to the above, the Examiner is respectfully requested to telephone the undersigned Attorney for Applicants.
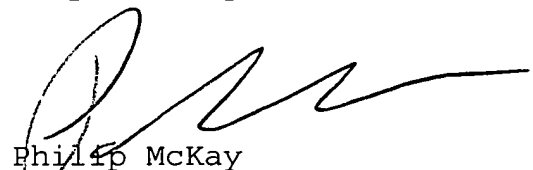
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